

**CLAIMS:**

What is claimed is:

- 5 1. A method for providing a description of current position in an electronic document, comprising:
  - 10     parsing an electronic document into a parse tree;
  - receiving a user request for a description of cursor position in the electronic document;
  - 15     using an algorithm to construct a position response by walking up the parse tree, from the tree node associated with the current position in the electronic document to the root of the electronic document; and
  - delivering the position response to the user.
- 15 2. The method according to claim 1, wherein the position response is audible.
- 20 3. The method according to claim 1, wherein the position response is by means of a tactile feedback mechanism.
- 25 4. The method according to claim 1, wherein the position response is by means of a text-only display.
5. The method according to claim 1, wherein the user command requesting cursor position is a voice command.
- 30 6. The method according to claim 1, wherein the algorithm uses text-to-speech technology.
7. The method according to claim 1, wherein the

position response comprises all nodes in the walk up the parse tree.

8. The method according to claim 1, further comprising:

5 constructing a position response for a new position in the electronic document;

comparing the position response for the new position with the position response for a previous position; and reporting to the user only those nodes in the new

10 position response which differ from the nodes in the previous position response.

9. The method according to claim 1, wherein the position response comprises:

15 a predefined number of nodes in the walk up the parse tree;

wherein the predefined number of nodes is set by the user and limited by the number of nodes between the current position and the electronic document root.

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10. The method according to claim 1, wherein the electronic document is a HTML document.

11. The method according to claim 1, wherein the

25 electronic document is a XML document.

12. A method for receiving a description of current position in an electronic document, comprising:

30 entering a user command requesting a description of cursor position in an electronic document; and

receiving a position response comprising nodes in a walk up a parse tree constructed from the electronic document.

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13. The method according to claim 12, wherein the step of entering a user request for cursor position is by means of voice command.

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14. The method according to claim 12, wherein the position response comprises all nodes in the walk up the parse tree.

10 15. The method according to claim 12, wherein the position response is audible.

16. The method according to claim 12, wherein the position response is by means of a tactile feedback mechanism.

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17. The method according to claim 12, wherein the position response is by means of a text-only display.

20 18. The method according to claim 12, wherein the position response comprises:

    a predefined number of nodes;

    wherein the predefined number of nodes is set by the user and is limited by the number of nodes between the current position and the root of the electronic document.

25 19. The method according to claim 12, wherein the position response comprises only those nodes which differ from a previous position response.

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20. A computer program product in a computer readable medium for use in a data processing system, for providing a description of current position in an electronic

document, the computer program product comprising:

instructions for parsing an electronic document into a parse tree;

instructions for receiving a user command requesting cursor position in the electronic document;

an algorithm to construct a position response by walking up the parse tree, from the tree node associated with the current position in the electronic document to the root of the electronic document; and

instructions for delivering the position response to the user.

21. The computer program product according to claim 20, wherein the algorithm uses text-to-speech technology.

22. The computer program product according to claim 20, wherein the position response comprises all nodes in the walk up the parse tree.

23. The computer program product according to claim 20, further comprising:

an algorithm for constructing a position response for a new position in the electronic document;

instructions for comparing the position response for the new position with the position response for a previous position; and

instructions for reporting to the user only those nodes in the new position response which differ from the nodes in the previous position response.

24. The computer program product according to claim 20, wherein the position response comprises:

a predefined number of nodes in the walk up the parse tree;

00 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F

wherein the predefined number of nodes is set by the user and limited by the number of nodes between the current position and the electronic document root.

5 25. The computer program product according to claim 20, wherein the electronic document is a HTML document.

26. The computer program product according to claim 20, wherein the electronic document is a XML document.

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27. A computer program product in a computer readable medium for use in a data processing system, for receiving a description of current position in an electronic document, the computer program product comprising:

15 instructions for entering a user command requesting a description of cursor position in an electronic document; and

instructions for receiving a position response comprising nodes in a walk up a parse tree constructed

20 from the electronic document.

28. An apparatus for providing a description of current position in an electronic document, comprising:

25 a parsing component which parses an electronic document into a parse tree;

a command receiver which receives a user command requesting a description of cursor position in the electronic document;

30 a data processor which uses an algorithm to construct a position response by walking up the parse tree, from the tree node associated with the current position in the electronic document to the root of the electronic document; and

a feedback mechanism to deliver the position response to the user.

29. A system for receiving a description of current  
5 position in an electronic document, comprising:

means for entering a user command requesting a description of cursor position in an electronic document; and

means for receiving a position response comprising  
10 nodes in a walk up a parse tree constructed from the  
electronic document.